

Patent claims

1. A plant for producing a nonwoven web of fibres (20) out of fibrous material and which comprises a defibrator (1), such as a hammer mill, for defibrating the fibre material, and at least one forming head (2) for forming a fibre web (20) on an endless forming wire (3) which, during operation, runs mainly horizontally, a first transport (9) fan for transporting defibrated fibre to the forming head via a first air duct (10), and a second transport fan (22) to extract nits from the forming head via a second air duct (21), **characterised** in that the plant also includes a separator (4), connected to the second air duct (21), for separating nits and well-opened fibres.
2. A plant according to claim 1, **characterised** in that it comprises a third transport fan (23) for returning the separated, well-opened fibres to the forming head via a third air duct (24).
3. A plant according to claim 1 or 2, **characterised** in that it comprises a fourth transport fan (25) to remove the separated nits from the nits separator via a fourth air duct (26).
4. A plant according to claim 1, 2 or 3, **characterised** in that it comprises a nits-opener (5) to convert the separated nits into well-opened fibres.
5. A plant according to any of the claims 1-4, **characterised** in that the fourth air duct (26) extends between the nits separator (4) and the nits-opener (5) and that this is also connected to the forming head (2) via a fifth air duct (27)

with a fifth transport fan (29) for returning the opened nits to the forming head (2).

- 5 6. A plant according to any one of the claims 1 - 5,
characterised in that the nits separator (4) is a forming head.
- 10 7. A plant according to any one of the claims 1 - 5,
characterised in that the nits separator (4) is a cyclone.
8. A plant according to claim 4, **characterised** in that the nits-opener (5) is a hammer mill.
- 15 9. A plant according to claim 4, **characterised** in that the nits-opener (5) is a refiner, designed to defibrate the nits between two grinding discs.
- 20 10. A plant according to any one of the claims 1 - 5,
characterised in that the nits-opener (5) is constructed in the form of a card.